Our Shared Journey: Coastal Zone Management Past, Present and Future

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Selected Historic Landmarks

× 1972	CZMA enacted and signed
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*** 1974/76** Washington State program approved

*** 1976** CZMA Amendments create Coastal

Energy Impact Program

№ 1977 Oregon State program approved

■ 1978 Maryland and ten other State programs approved

CZ78 convenes at the Jack Tar Hotel in San Francisco, CA...



"...to bring together professional planners, engineers, environmentalists, government administrators and interested individuals in an atmosphere that will stimulate productive discussion and interaction on the leading coastal zone management issues of the day."

FOCUS ON SOLUTIONS! (Orville Magoon)

EARLY LESSONS FROM THIS "BOLD EXPERIMENT" (Robert. W. Knecht)

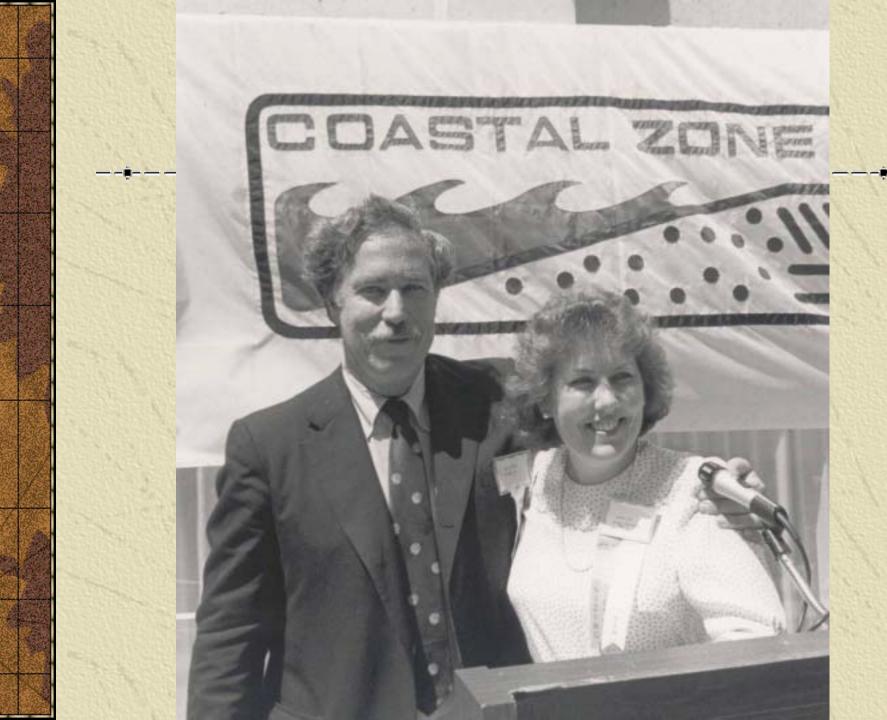




- Sharing experiences supports practical problem-solving
- Flexibility and adaptability critical
- ★ Leadership essential government (at all levels), business, NGOs, communities, law, science, engineering & education
- Shared support and responsibility from public & private sectors



- Partnership between coastal science and policy
- International dimensions exciting and essential
- **** Beginning to see the depth and breadth of the challenge (and opportunity)**
- **** Importance of periodically taking current bearings and plotting a course for the future**













Back to the Journey...

- * 1979 Coastal programs in 19 states covering 69% of the Nation's shoreline
- 1980 9 estuarine reserves in 8 states; TODAY: 25 estuarine areas in the National Estuarine Research Reserve System in 22 states
- ** 1986 Approval of Virginia program; 90% of the U.S. coastline covered by CZM programs in 29 states and territories



- * Coastal Zone Enhancement Program;
 Areas of National Significance:
 - > Wetlands Protection
 - > Coastal Hazards
 - Cumulative & Secondary Impacts of Development
 - > Public Access to the Coast
 - > Special Area Management
 - >Ocean Governance
 - > Marine Debris
 - **▶** Government and Energy Facilities Siting

1990 Amendments

- * Section 6217 "Protecting Coastal Waters"
 - > Requires coastal, non-point pollution control programs
 - Enhanced level of coordination at Federal level (NOAA & EPA)
- **** Watershed Management as a special challenge and opportunity:**
 - >"Water is Gold"
 - >CZM's role in sustaining this valuable resource
 - >Implications for coastal waters/resources (e.g. coral reefs)
 - ➤ Integrated approach:
 - Critical interactions (land, water, plants & people)
 - Collaborative approach to management

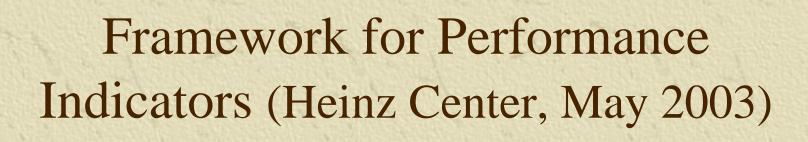


The Past Decade...

- ** 1992 States & territories assess
 "Enhancement Program" activities
 - & prioritize needs
- ** 1993 World Bank publishes Noordwijk Guidelines for Integrated Coastal Zone Management; World Coast Conference
- Department of Commerce Inspector General calls on NOAA to develop "a strategy to measure the effectiveness of the CZM program"



- ** 1999 Marc Hershman & colleagues study the "effectiveness of Coastal Zone Management in the United States"
 - RECOMMENDS **DEVELOPMENT OF A COMMON SET OF INDICATORS** LINKING STATE PROGRAMS TO NATIONAL OBJECTIVES
- 2001 NOAA initiates development of a national performance measurement system; commissions Heinz Center Study
- ★ 2003 Heinz Center publishes a "Framework for Identifying Performance Indicators"



- *Six "focus areas" based on Section 303:
 - >Coastal Ecosystems
 - **≻**Coastal Water Quality
 - > Coastal Hazards
 - > Public Access
 - > Waterfront Development
 - ➤ Coastal-Dependent Uses (e.g., fishing & shipping)
- **Quantifying success** in 3-4 "measurable" dimensions for each focus area



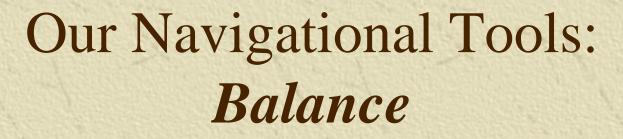
- ****34 out of 35 eligible states & territories** with approved programs covering 99.9% of the Nation's shoreline
- ★ Since 1974, approximately \$1.6 billion in Federal funds have been appropriated for coastal management; matched by states
- *As of 1998, 53% of Americans live in coastal regions (11% of the Nation's land); by 2025, 75% of the U.S. population is expected to live within 50 miles of the coast



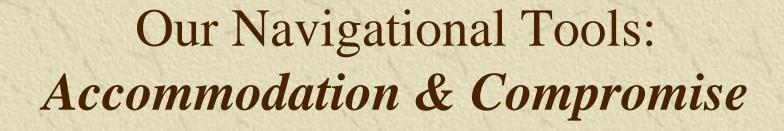
- *** Maritime commerce accounts for 95% of imports to and exports from the U.S.**
- Tax revenues associated with shipping contribute about \$20 billion annually in Federal, state and local taxes
- Commercial fisheries is a \$3.6 billion a year industry in the United States
- Outer continental shelf accounts for 30% of domestic oil and 27% of domestic gas production



- **™** More than 90% of marshes along U.S. coastlines have been destroyed; Louisiana alone has seen a net conversion of 4,000 square kilometers to open waters
- **★ Between 1972 and 1984, amount of public** recreational land increased by 27%; still not sufficient to meet increasing demands
- *Approximately 50% of all new residential, industrial, office, retail & recreational buildings constructed in coastal areas

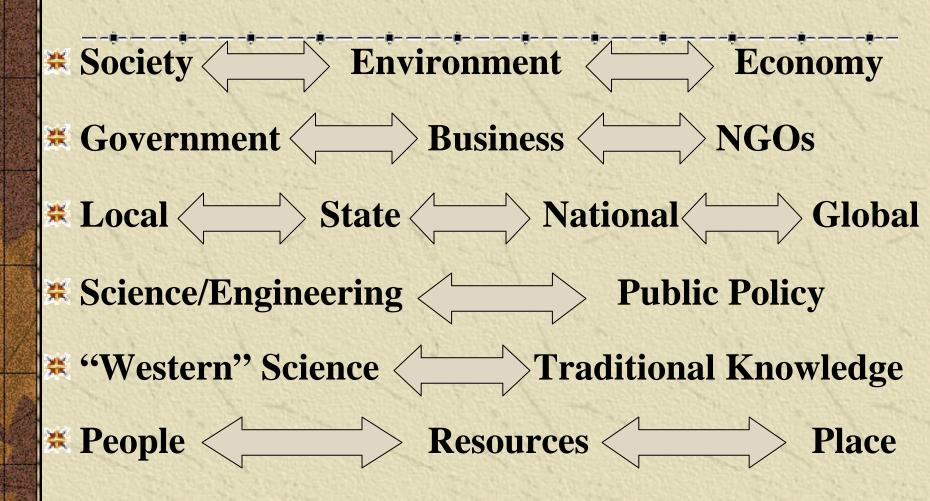


- **** Preservation-Protection-Development- Restoration/Enhancement**
- Competing stakeholder interests and needs
- *** Competing program objectives:**
 - Within individual programs
 - Between states/territories and national CZM objectives



- **Multiple** uses and users
- Understand and respect differing values and needs
- * Focus on practical problem-solving:
 - "Spotlight on Solutions"
- Opportunities to share insights & experience
- Culture & traditional with science, engineering

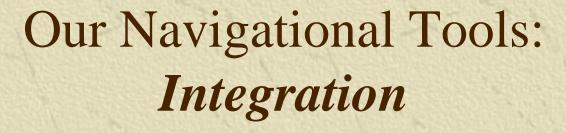
Our Navigational Tools: Partnerships



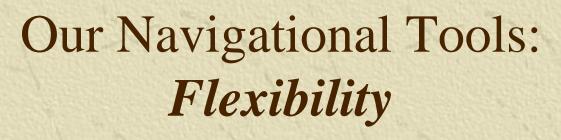


Our Navigational Tools: *Participation*

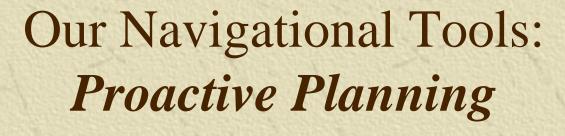
- * All interested parties
- ★ Development & maintenance of partnerships for the long term
- **Process as important as products and "measurable" outcomes
- ★ Interactive dialogue and joint problemsolving
- Education and outreach essential program elements



- * Different perspectives, values and needs
- "Inter-relatedness" as important as individual activities
- Social, cultural, economic, environmental
- Land, water, resource use & development patterns
- Interactions/interdependencies of ecosystems & resources
- * Local, state, Federal, international



- Dynamic systems people, environment, resources;
 Change (not stability) the rule
- Margine One size does not fit all
- **Example 2** Creative combinations; innovative approaches
- * Adaptive Management
 - >Iterative decision-making
 - >Continuous monitoring
 - Regular adjustments based on new insights & changing conditions
 - Learn from successes and failures



- *Address today's needs while planning for the future
- **™** *Meninkairoir* Take the long view
- Mechanisms to anticipate change and keep management flexible
- **Building Resilience** of coastal communities, businesses, ecosystems & resources
 - >Climate Risk Management a special challenge and opportunity



"Fuel" for Our Journey

***ENERGY**

****COMMITMENT**

***ENTHUSIASM**

***PASSION**

***OHANA**























`i ke aku, `i ke mai, kokua aku kokua mai; pela i ho la ka nohona ohana

> "Value and respect your family; help others, and be helped in return; such is a family relationship"

